Andrew Hursh (Montana Bar #68127109)
Bryan Hurlbutt (*pro hac vice*, Idaho Bar #8501)
ADVOCATES FOR THE WEST
966 Discovery Way
Missoula, Montana 59802
Tel: 208-268-5210 (Hursh)
208-730-6961 (Hurlbutt)
ahursh@advocateswest.org
bhurlbutt@advocateswest.org

Attorneys for Plaintiffs

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MONTANA

WILDEARTH GUARDIANS and WESTERN WATERSHEDS PROJECT, *Plaintiffs*, v. U.S. FISH AND WILDLIFE SERVICE, *Defendant*.	Case No. 9:24-cv-00066-DLC-KLD **PLAINTIFFS' STATEMENT OF UNDISPUTED FACTS**

Pursuant to Local Civil Rule 56.1(a), Plaintiffs WildEarth Guardians and Western Watersheds Project submit the following Statement of Undisputed Facts in support of Plaintiffs' Motion for Summary Judgment (ECF No. 18).

The Red Rock Lakes National Wildlife Refuge

1. President Franklin D. Roosevelt established Red Rock Lakes National Wildlife Refuge (the "Refuge") in 1935 "as a refuge and breeding ground for wild birds and animals." Administrative Record (AR) 340–41. Protection of the Refuge was motivated by the plight of the dwindling trumpeter swan; the area around Red Rock Lakes was the species' last known breeding location in the 1930s. AR340, 363. The Refuge is located in Beaverhead County, Montana, in the Centennial Valley, a high-elevation intermontane basin drained by the Red Rock River, a tributary to the Beaverhead River and ultimately the Missouri River. AR340, 386.

2. The Refuge protects over 69,000 acres of the Centennial Valley, including 20,000 acres of Refuge-managed conservation easements. AR370, 377. The Refuge also contains 32,350 acres designated as Wilderness, to be managed under the requirements of the Wilderness Act of 1964. AR401.

3. The Refuge is located in the middle of an important wildlife corridor linking the Greater Yellowstone and Bitterroot ecosystems. AR370, 423, 435–36.

4. The Refuge contains the largest wetland system in the Greater Yellowstone Ecosystem ("GYE"). AR368. The Refuge includes 25,000 acres of wetlands as well as rivers, streams, ponds, and three lakes. AR386.

5. The Refuge has some of the most naturally diverse habitats in the National Wildlife Refuge System. AR340, 370. As of 1994, the Refuge recorded 258 avian species, 42 mammal species, ten fish species, and five species of reptiles and amphibians. AR991. The Refuge plays an integral role in trumpeter swan conservation and provides critical nesting, breeding, and resting areas for other

migratory birds. AR370–73. The Refuge provides habitat for one of the last known endemic adfluvial (i.e., stream-spawning and then lake-dwelling) populations of Arctic grayling in the contiguous United States. AR421. It also supports sage-grouse, moose, gray wolves, grizzly bears, and other wildlife species. AR340, 368, 371, 397–400.

6. Visitor opportunities at the Refuge include hunting, fishing, wildlife observation, photography, canoeing and kayaking, camping, environmental education, and interpretation. AR401, 404–05. The annual number of visits to the Refuge in 2009 was estimated at 12,000. AR408.

Historical Commercial Livestock Grazing at the Refuge

7. "Prior to the establishment of the Refuge, landowners created large land disturbances through overgrazing cattle and grazing infrastructures, such as fencelines, roads, irrigation ditches, harrowing, and construction of water tanks, many of which can still be seen on the Refuge today." AR640.

8. When the Refuge was established in 1935, FWS discontinued cattle grazing because overgrazing was threatening the Refuge's ecological values. AR641. Subsequently, FWS renewed grazing on the premise that it might alleviate perceived hazards from fire and rodents at the Refuge. *Id.* But overgrazing occurred again, and in 1968, FWS reduced the amount of grazing authorized. *Id.*

9. FWS has recognized that its livestock grazing program on the Refuge evolved out of a system whereby grazing was simply "carried over with acquisition of private lands and to provide for positive public acceptance of the Refuge." AR993. It was through perpetuation of this system, rather than originating out of

habitat-based need, that "managers have attempted through time to insure that grazing was a use conducted for the benefit of wildlife." *Id.*

10. One factor complicating the dynamics of avoiding negative ecological effects from grazing is that practices of commercial livestock grazing are often informed and driven by the commercial operators themselves: "Refuge management can be constrained by the perceived need to provide grazing to five permittees whether grass is available or not. … Operational problems, such as economically dependent permittees, increase the complexity [of management]." AR997. "The expectation that permits will be issued can create a lack of flexibility in managing uplands," so FWS has noted that "decisions to deny permits can be politically controversial." AR996.

Contemporary Grazing Program

11. FWS currently authorizes commercial livestock grazing on the Refuge on the premise that cattle are a "tool" to "manage" wet meadow, grassland, and shrub-steppe habitats—including purportedly to mimic some behaviors and grazing habits of bison, which were present on the Refuge around the mid-1800s, and to reduce wildfire risk and combat invasive plants. AR958.

12. FWS authorizes grazing on 26 sub-units in the Refuge. AR958. These consist of approximately 7,491 acres of wet meadow, 14,005 acres of grassland, and 6,581 acres of shrub-steppe. *Id*. Grazing also occurs on 7 sub-units leased from the State of Montana, which include 190 acres of wet meadow, 3,140 acres of grassland, and 4,898 acres of sagebrush-steppe. *Id.* Nineteen of the Refuge's grazing sub-units overlap designated Wilderness. AR737.

13. FWS's implementation of livestock grazing on the Refuge has resulted in the extensive construction and maintenance of fences, including within designated Wilderness. AR737.

14. Since the mid-1990s, grazing levels have ranged from 0.31 to 0.85 animal unit months (AUMs) per acre, with an average of 4,165 AUMs used annually. AR958. An AUM is the amount of forage needed by an "animal unit" (AU) grazing for one month. AR643. The animal unit is defined as one mature 1,000-pound cow and her suckling calf. *Id.*

15. Grazing typically begins in early- to mid-summer and continues until October 1 each year. AR958.

Refuge Species and Grazing Impacts

Target Species

16. To achieve the Refuge's purpose, FWS has selected 13 "target species" for four habitats at the Refuge. Each has been identified as a species of "conservation concern," and each uses specific Refuge habitats during breeding and migration. AR413–430. "Wet Meadow" habitat target species are northern pintail, long-billed curlew, sandhill crane, short-eared owl, and greater sage-grouse; "Grassland and Shrub-steppe" target species are Brewer's sparrow, greater sage-grouse, Swainson's hawk and Ferruginous hawk; "Centennial Sandhills" target species are Brewer's sparrow and greater sage-grouse; and "Lake, Pond, and Marsh" habitat target species are trumpeter swan, lesser scaup, American wigeon, Franklin's gull, and Wilson's phalarope. *Id*.

17. FWS focuses on these species to "ensure diverse and productive

habitats for target species and other native wildlife," to "direct management actions for the greatest benefit of trust species," to "manage habitat and gauge response," and to further the "development of objectives that will guide management to meet target wildlife species habitat needs." AR413, 461, 501–502.

18. Grazing can have detrimental effects on birds and wildlife because, among other things, "[t]he presence of large numbers of livestock [] may occasionally trample or disturb nests [and] may discourage the use of habitat by potential ground nesting birds." AR987. Further, there "may be some spatial conflicts between cattle and wildlife." AR994.

19. FWS stated that it planned to start developing a comprehensive monitoring program for target species and their habitat at the Refuge beginning in 2023. *See* AR328; AR960. Because it has not had such a program to date, FWS lacks information to know how grazing has affected target species habitats. AR328.

Arctic Grayling

20. The Refuge provides habitat for one of the last known endemic populations of Arctic grayling in the contiguous United States. AR421. The grayling "has long been recognized by [FWS] as an important priority species on the refuge." AR364. FWS considers the Refuge to be a "grayling sanctuary" and notes the "importance of managing [the Refuge] for the conservation of this species." *Id.* "Today, Arctic grayling in the Centennial Valley remain imperiled." *Id.*; AR355. According to FWS, "about 50 years ago, Arctic grayling spawned in at least 12 streams in the Centennial Valley," but have now been "extirpated from all

but 2 streams," each tributaries to Upper and Lower Red Rock Lakes. *See* 75 Fed. Reg. 54708-01, 54724 (Sept. 8, 2010).[1]

21. FWS recognizes that grazing has taken a toll on riparian systems at the Refuge, including degradation of woody riparian vegetation and increased fine sediments in the streambed, summer water temperatures, and nutrient levels. AR421, 994–95, 1021. In 2009, FWS also noted that "livestock grazing, both historic and current, has had a detrimental effect on Arctic grayling spawning habitat by removing vegetation and increasing sediment and nutrient loads, as well as trampling of Arctic grayling eggs and fry in the stream gravels." AR421.

22. FWS has recognized that "historical livestock grazing both within the [Refuge] and on adjacent private lands negatively affected the condition of riparian habitats on tributaries to the Red Rock Lakes." 79 Fed. Reg. 49384-01, 49402 (Aug. 20, 2014). FWS stated in 2018 that "reduced stream flows, degraded and non-functioning instream and riparian habitats, barriers to Arctic grayling movement, and entrainment of Arctic grayling in irrigation ditches on non-Federal lands surrounding the Refuge are likely inhibiting further increases in distribution and abundance in the Centennial Valley." 83 Fed. Reg. 24487-01, 24488 (May 29, 2018).

[1] The Court may take judicial notice of these and other facts cited from FWS's rulemakings published in the Federal Register. *See* Fed. R. Civ. P. 201; 44 U.S.C. § 1507 ("The contents of the Federal Register shall be judicially noticed[.]").

Grizzly Bears

23. Grizzly bears have been listed as threatened under the Endangered Species Act since 1975. *See* 40 Fed. Reg. 31734 (July 28, 1975). Grizzly bears presently use the Refuge. AR370, 400. Protected habitat at the Refuge is particularly valuable for grizzly bears because of the Refuge's role as a "critical wildlife corridor between the Bitterroot and Greater Yellowstone ecosystems." AR435.

24. As grizzly bear populations have increased in the GYE and bears have expanded their range and presence in surrounding areas, FWS has "extend[ed] a portion of the Demographic Monitoring Area (DMA) boundary… to include suitable grizzly bear habitat in the Centennial Mountains." 83 Fed. Reg. 18737-01, 18740 (Apr. 30, 2018). "The Centennial Mountains … provide an east-west corridor of suitable habitat from the GYE to the [Bitterroot] ecosystem." *Id.* FWS put "mortality limits" in the Centennial Mountains to limit mortalities in "this area of potential connectivity between the two ecosystems[.]" *Id*.

25. FWS has noted that "[e]xcessive human-caused mortality is still currently the primary factor affecting grizzly bears at both the individual and ecosystem levels." 88 Fed. Reg. 67193-01, 67197 (Sept. 29, 2023). "Grizzly bears [] need large, intact blocks of land with limited human influence and thus low potential for displacement and human-bear or livestock-bear interactions that could result in human-caused mortality." *Id.* FWS has recognized that livestock grazing "may increase the potential for mortality of grizzly bears via lethal control of depredating bears." *Id.* at 67207.

26. At the Refuge, FWS stated in 1994 that grizzly were "rare," "seldom seen," and not "known to occur on the refuge." AR1033. Grizzly are now present at the Refuge. AR340, 355. FWS has noted "one depredation incident that resulted in the loss of a bear" at the Refuge since 1994. AR1079. FWS's records also show one instance in which grizzly bears feeding on a part of the Refuge in 2015 caused a grazing permittee to need to move his cattle off the pasture. AR612.

Sage-Grouse

27. Another species that depends upon the Refuge is the greater sage-grouse, which is one of FWS's target species at the Refuge. AR425–430.

28. Researchers have noted that the sagebrush biome upon which this species relies is one of the "most imperiled major ecosystems in the United States … reduced to half of its historical extent due to fragmentation and conversion for livestock forage" and other land uses. AR1786. Sage-grouse populations have declined precipitously in parallel with damage to such habitats. AR1787.

29. The Centennial Valley is among FWS's designated "Priority Areas for Conservation" of greater sage-grouse. 80 Fed. Reg. 59858-01, 59873 (Oct. 2, 2015).

30. FWS has recognized conflict between livestock grazing and sage-grouse conservation, noting, for example, as follows: "In 2010, [FWS] evaluated the effect of grazing on sage-grouse (including domestic livestock, free-roaming equids, and wild ungulates) and concluded that improper grazing was likely having negative impacts to sagebrush and sage-grouse at local scales …." *Id.* at 59908.

31. FWS has explained that improperly managed grazing can have

adverse impacts to sage-grouse habitat:

> Improper grazing directly influences the composition, productivity, and structure of herbaceous plants in sagebrush plant communities, which in turn influences the quality and quantity of food and cover for sage-grouse. By reducing protective vegetative cover, improper grazing may make nesting and brood-rearing habitats less suitable for sage-grouse. Sage-grouse rely on the cover of tall grasses and shrubs to hide from predators, especially during the nesting season, and females will preferentially choose nesting sites based on the height of grasses and shrubs. Grass height is a strong predictor of nest survival and hiding cover can increase nest success, a key vital rate for sage-grouse. Loss of this hiding cover may increase predation during nesting and brood-rearing, subsequently reducing reproductive success rates. Maintaining adequate residual grass height and cover under shrubs minimized the negative effect of grazing on sage-grouse productivity.
>
> Improper livestock grazing can reduce food available to sage-grouse, which can impact reproductive success and chick survival. Improper livestock grazing in mesic, brood-rearing habitat may further reduce food resources by altering soils and hydrology and reducing herbaceous plants. Improper livestock grazing may also reduce the cover and height of sagebrush in key wintering habitats, potentially affecting the condition and survival of sage-grouse during the winter when resources are scarce.

Id. at 59909 (internal citations omitted).

32. FWS has also explained that livestock grazing has direct effects on sage-grouse:

> Nearby livestock can cause females to flush from their nests, inadvertently revealing the nest and its eggs to predators, such as ravens and the abundance of raven predators in sage-grouse habitats may increase near livestock grazing. Livestock can trample or disturb nests. … Construction and development associated with grazing, such as watering developments and fences, can have a variety of impacts such as habitat fragmentation and the facilitation of predators and disease.

Id. (internal citations omitted).

33. A graduate dissertation conducted in the Centennial Valley noted that "high [cattle] stocking rates [have] been cited as a threat to sagebrush habitats" and "[r]emoval of nesting cover due to grazing has been shown to increase predation and alter nest site selection." AR1684–85.

34. Another graduate dissertation conducted at the Refuge addressed how sage-grouse avoidance of grazing impacts led to maladaptive nest selection, and how there was a "grazing effect linked to fences that is relevant for future grazing management … adding more fences to control livestock grazing systems could be reasonably expected to reduce sage-grouse nest survival." AR1882. The study also found "grazing effects on sage-grouse nests and broods that pertains to: 1) fences, 2) cattle paths, and 3) grazing intensity. Sage-grouse consistently avoided areas with cattle paths during both the nesting and brood-rearing periods." AR1886.

Grazing Impacts and Climate Change

35. The Centennial Valley has become significantly warmer and drier over the past 75 years. AR2906. Climate change and warming are expected to affect a variety of natural processes and resources in the future, and research has shown that "climate change is one [of] the greatest threats to grassland conservation." AR211. "Warming temperatures exacerbate the pressures on grasslands, with historic droughts, wildfires, and invasive species threatening the grassland ecosystems and the communities they support." AR1921.

36. FWS has stated that "climate change is expected to substantially reduce the thermally suitable habitat for coldwater fish species," and "climate

change could lead to further range contractions of Arctic grayling of the upper Missouri River and may increase the species' risk of extinction over the next 30 to 40 years as climate impacts interact with existing stressors, such as habitat degradation, stream dewatering, drought, and interactions with nonnative trout." 75 Fed. Reg. at 54740 (internal citation omitted). FWS "expect[s] the severity and scope of key threats (habitat degradation and fragmentation, stream dewatering, and nonnative trout) to increase in the foreseeable future because of climate change effects that are already measurable." *Id.*

37. Similarly, FWS has said that "[c]limate change may result in a number of changes to grizzly bear habitat, denning times, shifts in the abundance and distribution of natural food sources, and changes in fire regimes. Changes in denning times may increase the potential for conflicts with humans." 83 Fed. Reg. at 18742.

38. Regarding sage-grouse, FWS has also noted that "[b]eyond affecting sagebrush directly, the effects of climate change can interact with and increase effects from other stressors, such as invasive plants, drought, and wildfire. For example, cheatgrass grows best with wet and warm conditions, so increasing temperature coupled with increased winter and spring precipitation is likely to facilitate its spread. Combined, these stressors could have additive impacts to sagebrush habitat[.]" 80 Fed. Reg. at 59921 (internal citations omitted).

1994 Environmental Assessment

39. In July 1994, FWS issued a "Final Environmental Assessment, Red Rock Lakes National Wildlife Refuge, Management of Upland Habitats" (the

"1994 EA"), under the National Environmental Policy Act. AR976–1072.

40. The 1994 EA considered whether to continue allowing livestock grazing at the Refuge, and under what conditions, by evaluating multiple alternatives: no action (which would continue the existing grazing program); no grazing; grazing by native animals only; increased livestock grazing; and livestock grazing using adaptive management by prescription. AR984–85. Ultimately, FWS selected livestock grazing using adaptive management by prescription, rejecting the no action (continue existing grazing) alternative. AR977.

41. The 1994 EA also specified that: "Grazing must be monitored, controlled and replanned to ensure the desired effects are accomplished," and "[e]ffective use of grazing requires high levels of management by both permittees and Refuge staff." AR987.

42. On September 14, 1994, FWS signed a one-page "Finding of No Significant Impact" ("FONSI"), rejecting the then-existing grazing program, and selecting instead the 1994 EA's alternative for grazing using adaptive management by prescription. AR977.

The Rest-Rotation Grazing Program Rejected in the 1994 EA

43. The no action alternative, which would have continued the then-existing grazing program, was described in the 1994 EA as a "three-pasture, rest-rotation system" with "deficiencies." AR984. Generally, under the "three-pasture, rest-rotation system," some of the Refuge's pastures are grazed during one year (generally from July 15 to November 15), and then those pastures are rested for two years, while other pastures are grazed; then the cycle is repeated. AR993.

44. The 1994 EA warned that "[a]lthough grazing has been substantially reduced from historical levels," "negative impacts or long term plant species changes can still occur" under the existing program, and "[i]n the long-term, the purposes of the Refuge would not be achieved." AR984.

45. The 1994 EA also explained that the "Refuge is interlaced with several miles of major creeks and streams to smaller brooks." AR990. And while "[g]razing was totally eliminated from major Refuge riparian areas in the mid-1980s," *id.*, FWS found that "[m]inor streams and brooks still experience bank de-stabilization and degradation from cattle impact, contributing to riparian area concerns," as they are the "only water in some units." AR994–95.

46. In the 1994 EA, FWS also warned that "[d]ue to competing priorities and funding and staff shortages, there is a general lack of current on-site data to assess impacts" of grazing. AR996. "Data is gathered as time and priorities permit and first hand observations are used to evaluate habitat conditions." *Id.* FWS added: "The three pasture rest-rotation system makes assigning units to be grazed more like clockwork, assuming the unit is deemed to need grazing. This reduces staff overhead which may be otherwise needed to annually prescribe use." AR996.

47. FWS concluded that while the then-existing grazing program had benefits, it also had "several negatives" which "require[d] the present program to be improved." AR997. "To maintain compatibility, improvements are needed in monitoring, on-site management studies, less permittee economic dependency on the Refuge, and more flexibility in management tools, forage allocations and season of use." *Id.*

The Adaptive Management Grazing Program Selected in the 1994 EA

48. In the 1994 EA and FONSI, FWS adopted an "adaptive management by prescription" grazing program, which the EA described as follows: "[T]his alternative calls for defining a Desired Plant and Animal Community, refining objectives, developing annual prescriptions for habitat treatment, and selecting the appropriate management tools on an as needed basis." AR984.

49. To ensure compatibility with Refuge goals, FWS determined that "several administrative changes to the existing [grazing] program are needed," including:

> To implement adaptive management, prescriptions will be written before habitats are treated with a management tool. Monitoring will be more structured as part of this prescription. The process will require Refuge staff to plan, monitor, analyze, adjust, and replan for the following year, rather than rely on a pre-determined rest-rotation schedule.

AR1002.

50. FWS stated in the 1994 EA that the same amount of grazing (4,000–5,000 AUMs) will be allocated to permittees as before, but "the current three-pasture, rest-rotation system will be phased out as management by prescription is phased in." AR1005. FWS also stated: "The approach will direct that the needs of wildlife be considered first and insure continued compatibility with the purpose of providing []refuge and breeding ground for wild birds and animals[]." AR1008.

51. The 1994 EA also required that "[b]efore manipulating an area, a brief, site-specific Prescribed Habitat Treatment Plan … will be prepared …. The prescription will require that Refuge staff undergo a thorough thought process

before making a decision on whether to treat an area." AR1005. "The treatment plan will discuss the rationale, problem areas, and measures needed for successful treatment, including additional fence modifications for protection of riparian or other values." *Id.* The 1994 EA included a draft Site-specific Prescribed Habitat Treatment Plan, which calls for pre-treatment site evaluations and calls for details about the planned actions, contingency plans, funding and personnel, public coordination, criticisms, and post-treatment monitoring. AR1024.

52. FWS also committed to undertaking the following in the 1994 EA:

(1) "A current ecological site and condition survey to revise the 1987 figures";

(2) "Improving the inventory of Refuge lands and wildlife resources and assessing the results of combined effects treatment";

(3) "The preparation of a site or habitat management prescription before a treatment or tool is selected";

(4) "Increasing the flexibility of timing and use of management tools";

(5) "Annual evaluation of the objectives for various habitat types in order to refine them";

(6) "Follow-up monitoring to insure the prescription management plan is complete"; and

(7) "Pre- and post-season consultation with various entities, including the Montana Natural Heritage Program, the Montana Riparian Association, Refuge grazing permittees, and others, to insure their viewpoints are considered and needs met to the extent practicable."

AR1007–08.

2009 Comprehensive Conservation Plan

53. In June 2009, FWS published a "Comprehensive Conservation Plan, Red Rock Lakes National Wildlife Refuge, MT" (the "2009 Plan"). AR334–544. The 2009 Plan was adopted under the National Wildlife Refuge System Improvement Act, 16 U.S.C. § 668dd *et seq*. ("Refuge Act"), which requires FWS to manage National Wildlife Refuge lands consistent with such plans.

54. The 2009 Plan for the Refuge stated that it "specifies the necessary actions to achieve the vision and purposes of the refuge," and that "[w]ildlife is the first priority in refuge management." AR346.

55. One of the "key issues" FWS identified when preparing the 2009 Plan was "inadequate monitoring of the current grazing program to determine its effectiveness as a management tool." AR342. FWS acknowledged that the adaptive management by prescription grazing program from the 1994 EA was "never fully actualized," and that grazing was still "currently run on what is a 3-year grazing unit rest-rotation cycle with very little monitoring of grazing impacts on habitats." AR373. FWS explained in the 2009 Plan: "Changes in the grazing program must take place in order for this to be an effective management tool for habitat manipulation and wildlife benefit." *Id.*

56. In conformance with the Refuge Act, the 2009 Plan contained a section on "Management Direction." AR412–40. This section identified five areas of "management focus" for the Refuge, including the following provisions related to grazing:

> Management actions (such as prescriptive grazing and prescribed fire) will only occur on the refuge to achieve specific habitat and wildlife objectives, and will include increased and improved oversight, monitoring, and research conducted to assess if management objectives are being met.

AR412. The above is repeated in multiple parts of the plan, including as one of the required "strategies" to achieve objectives at the Refuge. AR343, 425, 477, 498.

57. In the Management Direction section, the 2009 Plan identified additional required strategies related to grazing, including:

(a) water-quality monitoring "will be conducted" to ensure grazing does not adversely affect Refuge lakes, AR415;

(b) a vegetation monitoring program will be conducted to assess if target species habitat requirements are being met "within 5 years of [Plan] approval," AR425;

(c) FWS will work with partners to conduct a range survey of the refuge to assess current range health and stocking rates, AR425;

(d) FWS will evaluate interior fences to determine their condition and effectiveness in managing grazing, AR427; and

(e) FWS will "[c]ooperate with BLM and The Nature Conservancy to determine the effectiveness of prescribed fire and cattle grazing to create or maintain early seral habitats in suitable portions of the Centennial Sandhills within 5 years of [Plan] approval," AR430.

58. The 2009 Plan also included a Compatibility Determination for the grazing program. AR501–02. FWS here admitted that it may be difficult to meet habitat objectives through the use of grazing if fences are not maintained, and that

"[m]aintenance of the fences is a constant effort due to weather, water, animal, and human impacts." AR501. FWS also acknowledged grazing on the Refuge threatens to disturb wildlife and degrade water quality and aquatic habitat, stating:

> [M]anagement of upland habitats adjacent to natural lakes (such as Upper and Swan lakes) and marshes could result in elevated levels of these nutrients [(nitrogen and phosphorus)] in the lakes. Elevated levels of phosphorus and nitrogen can lead to increases in algae and turbidity in shallow lakes, which may ultimately lead to significant losses of submerged aquatic vegetation communities . . . . In addition, the presence of livestock will be disturbing to some wildlife species and some visitors.

AR502.

59. FWS asserted in the 2009 Plan, however, that the benefits of grazing to manage habitat "are felt to outweigh these negative impacts," and found grazing to be compatible with the Refuge's purposes so long as six "stipulations necessary to ensure compatibility" were carried out: (1) maintaining existing riparian fences and using temporary fencing to protect habitats from cattle; (2) conducting a vegetation monitoring program to assess whether focal species habitat requirements are being met; (3) conducting a study to determine the impacts of cattle grazing on small-mammal populations; (4) beginning vegetation monitoring of shrub-steppe and grassland habitats to determine whether there is sufficient coverage of specific plant species; (5) monitoring the nutrient levels of Lower Red Rock, Upper Red Rock, and Swan lakes to prevent negative impacts to the lakes; and (6) monitoring and restricting grazing as necessary to minimize disturbances to nesting birds. AR502.

60. In the "Justification" section of the 2009 Plan's grazing compatibility

determination, FWS explained: "Prescribed grazing is a useful tool because it can be controlled, and results of the grazing can be monitored (for example, vegetation monitoring) so that adjustments to the program can be made in order to meet habitat goals and objectives." *Id.*

61. In the 2009 Plan, FWS nevertheless admitted that "[c]urrent staff, funding levels, and facilities available to manage this large land base is inadequate." AR377. It also acknowledged that "[c]urrent refuge staff and funding resources are limited for the purposes of monitoring habitats and implementing research needs to understand the impacts of grazing on refuge habitats." AR502. FWS explained: "The refuge currently has a full-time staff of five, including two managers, a biologist, an administrative assistant, and a maintenance worker." AR377. FWS identified additional staff needed to carry out the Plan's grazing and other strategies and objectives, including adding one permanent full-time wildlife biologist, at least three temporary biological science technicians, and one permanent full-time range technician, among other additions. AR412–13; 437.

Grazing Program Since 2009

62. Since 2009, FWS has gathered only limited, intermittent information regarding grazing and wildlife habitat at the Refuge:

(a) A 2014 vegetation survey "focused on how target species' habitat changes with grazing," which resulted in some "preliminary results." AR1536–39.

(b) A study published in 2013, reporting data collected during the 2007 grazing season, which addressed the relationship between a pasture's

time since grazing and vole abundance. AR1523–1535.

(c) A study published in 2016, reporting data collected in 2009, which modeled the breeding season occupancy of curlews and sandhill cranes based on distances from emergent marsh habitats and vegetation heights as influenced by grazing. AR1662–1675.

(d) A graduate dissertation published in 2016 that included two studies on greater sage-grouse, one on nest site selection and one on brood home range sizes. AR1676–1765. Each study utilized data from unspecified locations "found across the entire length of the [Centennial] valley." AR1698, 1724.

(e) A graduate dissertation published in 2021 that addressed greater sage-grouse in a study titled "Maladaptive Nest-Site Selection by a Sagebrush Dependent Species in a Grazing-Modified Landscape." AR1766–1903.

63. The 2014 survey noted that FWS had done little to modify stocking rates over the years and continued to "mostly use[] recommendations from the 1986/1987 range surveys when determining stocking rates for individual grazing units." AR651.

64. The 2014 survey recommended that "additional forage production data should be collected prior to providing formalized updated stocking rates in order to form more long-term forage production averages from several years with varying annual precipitation." AR651. It also noted that FWS continued to "utilize[] a three-year rest-rotation grazing strategy, in which most units are given three years of rest before another grazing event." AR652. Instead of this approach,

it "recommend[ed] that an annual habitat work plan (AHWP) be completed prior to each grazing season . . . Grazing treatments should be selected in response to changes in community composition and vegetation structure, and may differ depending on resource conditions." AR684. An appendix provided an example of such a work plan. AR728.

65. Nothing in the Administrative Record demonstrates FWS following through on its 2014 recommendations for more research, updated stocking rates, or annual habitat workplans. For example, the per-unit grazing rates applied by the 1987 Range Survey, summarized at AR2038, can be partially compared to those authorized as summarized in FWS's contemporary chart of "allowable AUMs per unit," AR257. Not all unit labels match between the two periods, but among those that do, the majority of the rates in FWS's contemporary AUM chart are about the same or *higher* than listed in 1987. The sum of the allowable AUMs on the contemporary chart, AR257 (excluding the Alaska Basin and DNRC units), is several thousand AUMs greater than the sum listed in the 1980 plan, AR2038.

66. Similarly, from 2016–2022, most units remained stocked at the same rates and grazed about every three years. *See* AR610, 612. The 2023 Permits, discussed below, reflect authorization of rest-rotation grazing schedules and unit grazing rates either derived directly from the chart at AR257 or in several cases adjusted higher. AR66, 76, 86, 97, 107.

67. The Refuge has undertaken some adjustment of grazing unit practices over the years. For example, a few grazing units have been combined to form new, larger units, and a couple have been retired. AR318, 611. The Refuge's overall

level of grazing remains comparable to past practices, however, totaling over 25,000 acres with over 17,000 AUMs distributed among them. *See* AR257 (totals excluding state lease and DNRC units); AR958 (sum of wet meadow, grassland, and shrub-steppe acreage with grazing sub-units is 28,077). Because the Refuge contains about 25,000 acres of wetlands and lake surface, AR386, this means that nearly the entirety of the non-wetland Refuge is authorized for grazing. *See* AR528 (Refuge total acreage in 2009: 48,955).[2]

68. The record includes little reasoning behind any of these or similar changes FWS has made to the grazing program. For example, the Refuge allowed one operator to switch pastures when a scheduled unit was too wet in 2018, and the Refuge swapped another set of units in 2019 "per acting manager," with no further explanation. AR612.

69. In 2022, the Deputy Manager increased FWS's proposed stocking rate by 200 AUMs for one unit in an operator's new permit because the operator brought "to [his] attention previous AUM rates" and the Refuge sought to "be fair." AR13. The Deputy Manager noted in another email in 2023 that "some AUMs exceed and/or are less than what is prescribed as well as some units were grazed out of rotation," but he said "[i]t'd take too long to explain that." AR332–33.

70. In 2023, the Refuge Deputy Manager explained in an email the process by which he sets grazing rates: "I usually take a rough estimate of the

[2] The Refuge has acquired between 4,000 and 5,000 additional acres since 2009, but the contemporary total Refuge size is not documented in the administrative record.

previous three grazes and set that as the approximate AUM rate for a unit." AR13.

71. Similarly, nothing in the record demonstrates any analyses or practices through which FWS has utilized its limited Refuge-relevant research to adjust grazing implementation based on Refuge wildlife and ecological needs. Each of the four research studies noted above, ¶ 62, arose in documentation only during FWS's preparation of the 2023 Compatibility Determination, which occurred after FWS had issued its 2023–2027 grazing permits. FWS briefly cited each of those studies in a series of statements purporting to support the benefits of the ongoing, unchanged grazing program generally. AR962; *see infra* ¶ 85.

72. In an email exchange in 2023, the Refuge Deputy Manager admitted the Refuge is still in need of a "comprehensive monitoring program." AR328. He stated that he "believe[s]" that the Refuge's grazing program is achieving habitat goals, but admitted he lacks monitoring information to support his belief. *Id*.

2023 Permits Challenged Here

73. In January 2023, FWS issued five Commercial Agriculture Agreements ("CAAs") and Special Use Permits ("SUPs") authorizing livestock grazing for the period of June 1, 2023, to October 31, 2027 to five "operators." AR15–59 (jointly, the "2023 Permits").

74. Each CAA consists of a commercial SUP and a Plan of Operations, which outline terms and conditions of the authorized commercial livestock grazing on the Refuge. AR60–148. Each Plan of Operations has what is called an "Annual Work Plan," which sets forth a rotational grazing schedule for the Permit each year for the next five years. AR66, 76, 86, 97, 107.

75. The Annual Work Plans do not include requirements for or information about pre-treatment site evaluations, parameters of the planned actions, contingency plans, funding and personnel, public coordination, criticisms, and post-treatment monitoring. AR66, 76, 86, 97, 107. The Annual Work Plans merely set forth pre-determined rest-rotation grazing schedules for the next five years by assigning units to be grazed; setting on/off dates; providing approximate AUM rates; setting a rotational grazing schedule for units by year; and depicting a map of grazing areas. *Id*.; AR69, 79, 89–90, 100, 110.

76. On January 31, 2023, Plaintiff WildEarth Guardians wrote to FWS, warning that the agency had failed to follow through on grazing program commitments and requirements from the 2009 Plan and that, as a result, neither FWS nor the public can gauge whether livestock grazing as being implemented at the Refuge has met or will meet the purposes of the Refuge. AR741–49. The letter reminded FWS that the 2009 Plan's Compatibility Determination for grazing at the Refuge had expired in 2019, and advised FWS that NEPA requires it to prepare a full Environmental Impact Statement (EIS), or at least an EA, evaluating grazing's impacts and considering alternatives prior to permitting grazing at the Refuge in 2023. AR747–48.

77. Later in 2023—after having already issued the 2023 Permits—FWS attempted to bolster its decision to re-authorize grazing by issuing an "Environmental Action Statement" and a "Compatibility Determination" regarding continued grazing at the Refuge. AR956–66; AR972. FWS also prepared a short "memo to file" on "Adequacy of National Environmental Policy Act (NEPA)

Documentation for Grazing on Refuge." AR1078–79.

2023 Compatibility Determination

78. FWS released a draft of the 2023 Compatibility Determination for a 14-day public comment period on May 31, 2023. AR963–64.

79. On June 14, 2023, WildEarth Guardians submitted comments to FWS on the draft Compatibility Determination, again urging FWS to prepare an EIS or EA for any continued grazing; warning that livestock grazing without sufficient monitoring and corrective action, and without sufficient administrative means for FWS to ensure proper management, is not a compatible use under Refuge Act; and noting that FWS failed to consider effects of grazing on the Refuge's uniquely important and plummeting populations of Arctic grayling. AR170–79.

80. On June 30, 2023, FWS issued the 2023 Compatibility Determination, replacing the prior 2009 compatibility determination, and dismissed WildEarth Guardians' concerns. AR956–66.

81. In the 2023 Compatibility Determination, FWS settled on three stipulations as necessary to ensure grazing is compatible with the Refuge's purposes: (1) grazing will be conducted in accordance with the SUPs; (2) FWS will implement periodic vegetation monitoring as set forth in the CCP to assess species composition and whether habitat requirements are being met; and (3) existing riparian fences will be maintained, and wildlife-friendly, drop, and temporary fencing will be used as needed to protect riparian habitats from cattle. AR964.

82. The 2023 Compatibility Determination does not mention the requirements from the 1994 EA or 2009 Plan, including the requirement to change

from pre-determined rest-rotation grazing and requirement to use annual monitoring, assessment, planning, and adjustment before deciding whether to graze any particular area. AR956–66. It also does not acknowledge that the 1994 EA and 2009 Plan determined that, without these changes, grazing would not be compatible with the Refuge's values. *Id.*

83. In the 2023 Compatibility Determination, FWS relied on 2005–2007 field surveys for vegetation, referencing no new Refuge vegetation data from the past 16 years. AR959–60. FWS also referred to future plans to pursue vegetation monitoring: "[B]eginning in the summer of 2023, the Refuge is embarking on a comprehensive periodic vegetation monitoring program that includes a bird monitoring component." AR960. This information would later help provide Refuge staff "information needed to make informed wildlife and habitat decisions." *Id.*

84. To describe fish, wildlife, and plants that occur in or use that habitat that will be grazed, the 2023 Compatibility Determination states briefly that: "Elk, deer, rodents, foxes, coyotes, birds of prey, migratory and grassland nesting birds are periodically present in these areas." AR958. The Compatibility Determination's "Anticipated Impacts of the Use" section acknowledges that grazing can disturb wildlife and public users and that vegetation will be trampled. AR960–63. It asserts, however, that "[m]inimal negative impacts . . . are expected." AR960.

85. The 2023 Compatibility Determination does not mention Arctic grayling, grizzly bear, or climate change. *See* AR956–66. It dismisses impacts to sage-grouse in two sentences that reference two graduate dissertations conducted

in the Centennial Valley. AR962. The 2023 Compatibility Determination cites to only two other post-2009 studies. AR962; AR1523–1535 (2013 study, reporting data collected during the 2007 grazing season, regarding the relationship between a pasture's time since grazing and vole abundance); AR1662–1675 (2016 study, reporting data collected in 2009, regarding breeding season occupancy of curlews and sandhill cranes).

86. The 2023 Compatibility Determination points to the first sage-grouse study as demonstrating that "[c]urrent grazing practices have been shown to have little effect on sage-grouse." AR962. The study had surveyed the home range sizes of sage-grouse broods in six grazed pastures in the Centennial Valley, and while it found no home-range-size effect correlated with grazing, it explained that this was in large part because the grazing utilization rates in the area surveyed "were low enough that cattle did not have a significant effect on the grass heights." AR1721–22. The areas studied were stocked lightly at "4 [hectares] per AUM which is 1/3 of the recommended stocking rate." *Id*. The dissertation warned, "additional research is needed of sage-grouse broods that occupy pastures that are subjected to higher utilization levels." AR1744.

87. At the Refuge, FWS reports that grazing typically ranges from 0.31–0.85 AUMs per acre but is sometimes "as high as 2.17 AUMs per acre." AR958. The "4 hectares per AUM" from the dissertation equates to a mere 0.1 AUMs per acre.[3] Thus, stocking rates on the Refuge vary from three times to over 20 times

[3] One hectare is approximately 2.47 acres, so the study's 4 hectares per AUM calculates to about 9.88 acres per AUM (4 x 2.47 = 9.88). That rate inverts to 0.1 AUMs per acre (1 / 9.88 = 0.1).

greater than on the study's surveyed pastures, but FWS never acknowledged this in the Compatibility Determination. AR962.

88. The 2023 Compatibility Determination pointed to the second sage-grouse study to note that Refuge grazing occurs "after nesting periods." AR962. That study also included discussions about the impacts of grazing and grazing infrastructure, including impacts from maladaptive nest site selection, cattle paths, grazing intensity, and fencing. AR1882–89. The study also warned that "adding more fences to control livestock grazing systems could be reasonably expected to reduce sage-grouse nest survival." AR1882. The Compatibility Determination never mentions the trade-off between fencing and sage-grouse impacts and never acknowledges the other negative effects of livestock grazing raised in this study. AR962.

89. The 2023 Compatibility Determination includes a section on "Availability of Resources," where FWS says that the "Refuge has three staffing positions that assist with grazing" and that "seasonal hires have assisted with monitoring and conducted research related to grazing." AR959. It adds that FWS expects to continue these staffing levels and practices into the future. AR960. The 2023 Compatibility Determination does not mention that in the 2009 Plan, FWS determined the existing staff (five full time, plus seasonal) was not adequate to carry out the necessary monitoring and management. AR959–60.

2023 Environmental Action Statement & Supporting Memo

90. Instead of preparing a new NEPA analysis assessing and comparing the impacts of the current grazing program and alternatives, FWS issued its one-

page Environmental Action Statement on May 30, 2023, finding that the 1994 EA still sufficed. AR972. It included a single written paragraph stating that FWS "determines all scientific conclusions, biological premises, and historical observations contained in the 1994 Environmental Assessment . . . to still be factual, relevant, and appropriate insofar as it relates to the grazing program." *Id*. It added: "The EA's preferred action of adaptive management by prescription continues to be an appropriate habitat management tool in concert with its finding of no significant impact," and asserted that the 2009 Plan "concurs with the EA's findings." *Id.*

91. FWS also prepared a two-page memo regarding the "Adequacy of National Environmental Policy Act (NEPA) Documentation for Grazing on Refuge." AR1078. In the first page of the memo, FWS asserts that the Refuge's current grazing program is "a continuation" and "essentially the same" as the adaptive management by prescription grazing program selected in the 1994 EA. AR1078.

92. Neither the Environmental Action Statement nor the supporting Memo mention that the 2009 Plan found FWS had not yet changed the existing grazing program to implement the adaptive management by prescriptive grazing program selected from the 1994 EA. *See* AR972; AR1078. FWS also never explains in either document how the current grazing program is similar to the program selected by the 1994. *See* AR972; AR1078.

93. The second page of the Memo discusses whether there are any changes to "Resource Areas" at the Refuge, including fish and wildlife (Arctic

grayling, grizzly bear, wolf, and native species), cultural resources, habitat types, native grasslands, climate change, and cumulative impacts. AR1079. With only one to four sentences per topic in the Memo, FWS dismisses each, asserting for some that there has been no change since 1994, and for others, that any change that has occurred does not warrant further environmental analysis. *Id.* No studies or monitoring data are identified to support any of the Memo's conclusions.

Respectfully submitted November 8th, 2024.

/s/ *Andrew Hursh*
Andrew Hursh (MT Bar #68127109)
Bryan Hurlbutt (*pro hac vice*, ID Bar #8501)
ADVOCATES FOR THE WEST
966 Discovery Way
Missoula, Montana 59802
Tel: 208-268-5210 (Hursh)
208-730-6961 (Hurlbutt)
ahursh@advocateswest.org
bhurlbutt@advocateswest.org

Attorneys for Plaintiffs